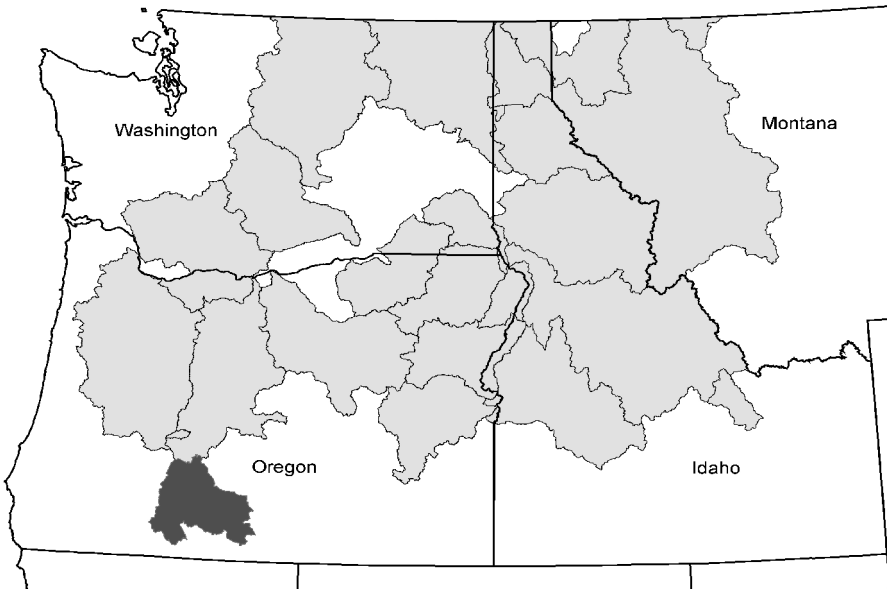
U.S. Fish & Wildlife Service

Bull Trout Draft Recovery Plan

and proposed Critical Habitat

Klamath River Basin Recovery Unit

(CHAPTER 2)



What areas are included in the Klamath River Recovery Unit?

The Klamath River Recovery Unit includes three distinct watersheds: the Upper Klamath Lake watershed, the Sycan watershed and the upper Sprague River watershed. These watersheds were included in a single recovery unit because bull trout in these waters probably had the ability to interact historically. The Upper Klamath Lake watershed includes Threemile and Sun Creeks. The Sycan watershed includes Long Creek and Coyote Creek. The upper Sprague River includes Deming, Leonard, Brownsworth and Boulder-Dixon creeks.

How much of the area is proposed as critical habitat?

A total of 296 miles of streams and 33,952 acres of lakes and reservoirs are proposed as critical habitat. This is approximately 9 percent of the streams, lakes and reservoirs in the Recovery Unit. Please refer to the text of the accompanying proposed critical habitat rule for more details.

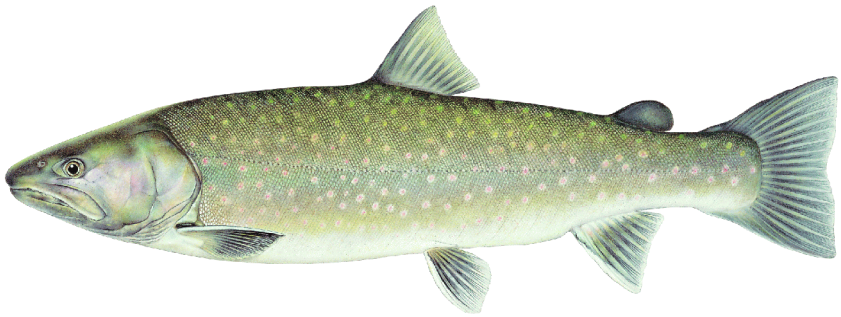
Who developed the draft Bull Trout Recovery Plan and critical habitat proposal?

The draft recovery plan for bull trout was developed through the collaboration of Federal, State, Tribal and private biologists working with representatives of local watersheds, private landowners and industry and conservation organizations. These recovery unit teams included experts in biology, hydrology and forestry, as well as natural resource users and stakeholders with interest and knowledge of bull trout and the habitats they depend on for survival. The critical habitat proposal was based in large part on information developed by the recovery unit teams and supplemented with even more recent information on the current distribution and habitat characteristics of the species.

What is the relationship between the draft Bull Trout Recovery Plan and the critical habitat proposal?

The draft recovery plan and critical habitat proposal are closely linked. The information developed by the recovery unit teams, and the science underlying that information, are the basis for the critical habitat proposals. However, critical habitat is designed to provide for the conservation of a species by identifying those

areas essential for conservation and requiring special management, whereas a recovery plan is a much larger blueprint providing guidance for the eventual recovery and de-listing of a species.



Who would be affected by recovery efforts and a critical habitat designation?

A recovery plan is advisory only and carries no regulatory authority. It is the Fish and Wildlife Service's estimation of the actions necessary for the recovery of the species. Agencies, communities or individuals are encouraged to take voluntary actions described in the recovery plan to benefit bull trout.

The primary effect of a critical habitat designation is that Federal agencies are required to consult with the Fish and Wildlife Service on actions they carry out, fund, or authorize that might affect critical habitat. It is important to note that in most cases, this is already occurring under the section 7 interagency consultation requirements of the Endangered Species Act. Non-Federal entities that may also be affected could include, for example, those seeking a U.S. Army Corps of Engineers 404 permit under the Clean Water Act to build an in-water structure, those seeking Federal approval to discharge effluent into the aquatic environment, or those seeking Federal funding to implement private property improvements, where such actions affect the aquatic environment that has been designated as critical habitat. In most cases where a link between activities on private lands and Federal funding, permitting, or authorization exists, consultation under section 7 of the Endangered Species Act is already occurring.

A critical habitat designation does not have any effect on non-Federal entities when there is not a Federal nexus. For example, swimming, boating, fishing, farming, ranching, or any of a range of activities normally conducted by a landowner or operator of a business not involving Federal funding, permitting, or authorization in order to occur would not be affected.

How was the draft recovery plan for the Klamath River recovery unit developed?

Recovery units were delineated based on the biology of the species and considerations for paralleling existing state conservation and fisheries management frameworks wherever possible. Recovery teams incorporated existing state conservation processes to the degree possible, depending on the degree to which they had been developed (for example, the Montana Bull Trout Restoration Plan, the State of Idaho's Bull Trout Conservation Plan, the State of Washington's Statewide Strategy to Recover Salmon and the Oregon Plan for Salmon and Watersheds).

What is the status of bull trout in the Klamath River Recovery Unit?

Klamath River bull trout were listed as a threatened species in 1998 because their abundance has been severely reduced, with remaining populations surviving in fragmented and degraded habitats, mostly in the upper reaches of the water-sheds. The Oregon Chapter of the American Fisheries Society reported in 1993 that nearly 40 percent of the known Klamath River basin populations were locally extinct. In the entire Klamath River Basin, nine local populations of bull trout persist in only 51 stream miles in three core areas, or about 21 percent of their historic range.

In the Upper Klamath Lake core area, bull trout are limited to about 16 stream miles in Threemile and Sun creeks. In the Sycan River core area, bull trout inhabit about 14 stream miles in Long and Coyote creeks and appear to persist in part of the Sycan Marsh. In the Upper Sprague River core area, bull trout are limited to about 21 stream miles in Deming, Leonard, Boulder, Dixon, Brownsworth and Sheepy creeks and in the North Fork Sprague River.

What are the threats to bull trout in the Klamath River Recovery Unit?

Watershed disruption has played a major role in the decline of bull trout in the Klamath River Basin. Channelization, water withdrawals, removal of streamside vegetation and other disturbances have altered the aquatic environment by elevating water temperatures, reducing water quantity and quality, and increasing sedimentation. Klamath River Basin bull trout continue to be threatened by habitat degradation and competition or hybridization from non-native brown and brook trout.

What are the recovery goals and objectives?

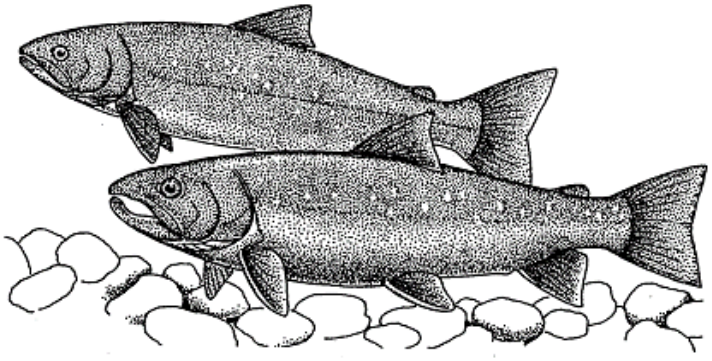
The goal of the bull trout recovery plan is to ensure the long-term persistence of self-sustaining, complex interacting groups of bull trout distributed across the species' range so that the species can be delisted. To recover bull trout in the Klamath River Basin, the following objectives have been identified:

- Maintain current distribution of bull trout and restore distribution in previously occupied areas within the Klamath River Recovery Unit.
- Maintain stable or increasing trends in abundance of bull trout within the Recovery Unit.
- Restore and maintain suitable habitat conditions for all bull trout life history states and strategies.
- Conserve genetic diversity and provide opportunity for interchange of genetic material among appropriate core populations.

What are the criteria for measuring recovery?

Recovery will be measured according to four criteria: distribution, abundance, population trends and connectivity in the watershed. The recovery plan includes specific, quantifiable standards for each of these criteria.

- **Distribution criteria** will be met when the current distribution of bull trout in the existing nine local populations is maintained and distribution is expanded by establishing bull trout in areas identified as suitable for additional local populations. To ensure populations of at least 100 adult bull trout spawners per local population totaling, where feasible, 1,000 adult spawners per core area, 3 to 5 new populations will need to be added to the existing 2 populations in Upper Klamath Lake; 3 to 5 new populations will need to be added to the existing 2 populations in the Sycan River; and 5 to 7 populations will need to be added to the existing 5 populations in the Upper Sprague River.
- **Abundance criteria** will be met when the estimated number of adult bull trout is at least 8,250 individuals distributed among the Upper Klamath Lake, Sycan River and Upper Sprague River core areas, based on 10 years of monitoring. The current estimated abundance is approximately 2,120 adult spawners across the three core areas.
- **Trend criteria** will be met when adult bull trout exhibit stable or increasing trends in abundance in the Upper Klamath Lake, Sycan River and Upper Sprague River core areas, based on 10 years of monitoring data.
- **Connectivity criteria** will be met when barriers to bull trout migration in the Klamath



River Recovery Unit are have been addressed. This means replacing culverts that impede passage, installing fish passage at water diversions, installing fish screens at diversion canals and pipes, and removing other barriers that block passage or trap fish.

What actions will be necessary to recover bull trout in the Klamath River Recovery Unit?
Recommended recovery efforts build on the conservation strategy developed by the Klamath Basin Bull Trout Working Group, a public and private partnership formed in 1989. Generally, the strategy consists of enhancing habitat, reversing actions that degrade the habitat, eliminating barriers and removing non-native trout. Specific actions include excluding livestock from riparian areas adjacent to bull trout critical habitat; re-vegetating riparian zones; treating and obliterating roads near bull trout habitat to reduce sediment delivery to streams; and reducing timber harvest within riparian zones. More details are available in the full text of the Klamath River Recovery Unit chapter of the draft Bull Trout Recovery Plan.

How long will recovery take?
A recovery plan is advisory only and carries no regulatory authority; therefore it is difficult to determine how long it will take to recover bull trout in the Klamath River Recovery Unit. However, given our best estimate of what government agencies and others might do, it could take three to five bull trout generations (15 to 25 years) or longer before identified threats to the species can be significantly reduced and bull trout can be considered eligible for delisting.

How much will recovery cost?
Estimating the cost of recovery is difficult and complex, due to many variables and unknowns. However, the Klamath River Recovery Unit team has estimated that recovery could cost about $26 million spread over 25 years. This includes estimates of expenditures by local, Tribal, State and Federal governments and by private business and individuals. The estimates are attributed to bull trout conservation but other aquatic species also will benefit. The U.S. Fish and Wildlife Service is soliciting comments from the public on the estimated costs.

How can I obtain copies of the documents?
The documents, along with maps, fact sheets, photographs and other materials may be found on the Pacific Region's website at http://species.fws.gov/bulltrout.

How can I comment?
The Service will be accepting comments, beginning November 29, 2002, on its draft recovery plan for bull trout in the Columbia and Klamath river basins and in the St. Mary-Belly River Basin in Montana. Comments on the draft recovery plan will be accepted for 90 days, until February 27, 2003.

Comments on the draft recovery plan may be mailed to the U.S. Fish and Wildlife Service, Snake River Basin Office, 1387 S. Vinnell Way, Room 368, Boise, ID 83709; faxed to 208-378-5262, or sent via e-mail to: fw1srbocomment@fws.gov

Beginning November 29, 2002, the U.S. Fish and Wildlife Service will accept comments from the public on the agency's proposal to designate critical habitat for the Columbia River and Klamath River distinct population segments of bull trout. Comments will be accepted for 60 days, until January 28, 2003. Comments on the critical habitat proposal may be submitted to the U.S. Fish and Wildlife Service, Regional Office, attn: John Young, Bull Trout Coordinator, 911 N.E. 11th Avenue, Portland Oregon 97232; faxed to 503.231.6243 or e-mailed to: R1bulltroutCH@r1.fws.gov

In addition, a series of public meetings and public hearings will be held in January. Times and locations will be posted on our Bull Trout website at http://species.fws.gov/bulltrout and publicized in local newspapers.

This is only a brief summary. Please see full draft recovery plan and critical habitat proposal for complete details.